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HEWLETT-PACKARD COMPANY  
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EXAMINER

TRAN, DOUGLAS Q

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/738,794

Applicant(s)

HAINES ET AL.

Examiner

Douglas Q. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 7-8, 10-11, 14, 16-19, 21-22, 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Kobayashi et al. (US Patent No. 6,735,641 B1).

As to claim 7, Kobayashi teaches an image forming device (71 in fig. 18) comprising:

an interface (i.e., network communication control unit in fig. 18) adapted to communicate with a communication medium external of the image forming device (2 in fig. 5);

imaging circuitry (i.e., printer mechanism engine unit 74 in fig. 18) configured to use an imaging consumable to form hard images (col. 10, lines 19-21):

a sensor (78 in fig. 18) configured to monitor a status of the imaging consumable (col. 10, lines 23-25 and fig. 19 indicates sheets, toner... would be a imaging consumable); and

processing circuitry (i.e., 75 and 73 in fig. 18) coupled with the sensor and configured to generate a message indicating the status of the imaging consumable

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(internal information table in figures 19 and 18, col. 10, lines 39-49) and to communicate the message externally of the image forming device using the interface at a predetermined moment in time (col. 10, lines 50-52: the contents of the internal information table is transmitted to the local unit 11 in accordance with inquiry commands by the local unit 11 in fig. 5 at a predetermined moment in time "col. 6, lines 7-12).

As to claim 8, Kobayashi discloses every feature discussed in claim 7, and further teaches the image circuitry is configured to print hard images upon media (i.e., toner or sheets in fig. 19).

As to claim 10, Kobayashi discloses every feature discussed in claim 7, and further teaches the processing circuitry is configured to generate the message comprising a composite message including a plurality of statuses corresponding to at least one imaging consumable ( the table 81 in fig. 19 indicates two statuses of the toner).

As to claim 11, Kobayashi teaches an image forming device (71 in fig. 18) comprising:

an interface (i.e., network communication control unit in fig. 18) adapted to communicate with a communication medium (2 in fig. 5);

imaging circuitry (i.e., printer mechanism engine unit 74 in fig. 18) configured to consume a plurality of imaging consumables to form hard images (col. 10, lines 19-21);

a sensor (78 in fig. 18) configured to monitor statuses of the imaging consumable (col. 10, lines 23-25 and fig. 19 indicates sheets, toner... would be a imaging consumable); and

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processing circuitry (i.e., 75 and 73 in fig. 18) coupled with the sensors and configured to generate a message indicating the statuses of the imaging consumable (internal information table in figures 19 and 18, col. 10, lines 39-49); and to communicate the message externally of the image forming device using the interface at a predetermined moment in time (col. 10, lines 50-52: the contents of the internal information table would be a composite message transmitted to the local unit 11 in fig. 5).

As to claim 14, Kobayashi discloses every feature discussed in claim 11, and further teaches the image circuitry is configured to print hard images upon media (i.e., toner or sheets in fig. 19).

As to claim 16, Kobayashi teaches storage circuitry (i.e., internal information table in fig. 18) and the processing circuitry is configured to process signals from the sensors and to forward statuses responsive to the signals to the storage circuitry for storage (col. 10, lines 42-45).

As to claim 17, Kobayashi teaches the method of facilitating ordering of an imaging consumable comprising:

providing an image forming device configured to use the imaging consumable to form hard images (col. 10, lines 19-21);

monitoring a status of the imaging consumable (col. 10, lines 23-25 and fig. 19 indicates sheets, toner... would be a imaging consumable);

generating a message indicating the status of the imaging consumable responsive to the monitoring (internal information table in figures 19 and 18, col. 10, lines 39-49);

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synchronizing with another image forming device (a plurality of printers 3-1 to 3-n in fig. 5 are in the synchronization; and

communicating the message externally of the image forming device responsive to the synchronizing ( col. 6, lines 7-11).

As to claim 18, Kobayashi discloses every feature discussed in claim 17, and further teaches the synchronizing comprises detecting a predetermined moment in time (a plurality of printers 3-1 to 3-n in fig. 5 are in the synchronization and col. 10, lines 50-52: the contents of the internal information table is transmitted to the local unit 11 in accordance with inquiry commands by the local unit 11 in fig. 5 at a predetermined moment in time “col. 6, lines 7-12).

As to claim 19, Kobayashi discloses every feature discussed in claim 17, and further teaches of providing the image forming device configured to print hard images upon media (i.e., toner or sheets in fig. 19).

As to claim 21, Kobayashi discloses every feature discussed in claim 17, and further teaches of generating the message comprising a composite message including a plurality of statuses corresponding to at least one imaging consumable (the table 81 in fig. 19 indicates two statuses of the toner).

As to claim 22, Kobayashi teaches the method of facilitating ordering of an imaging consumable comprising:

providing an image forming device configured to use the imaging consumable to form hard images (col. 10, lines 19-21);

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monitoring a status of the imaging consumable (col. 10, lines 23-25 and fig. 19 indicates sheets, toner... would be a imaging consumable);

generating a message indicating the status of the imaging consumable responsive to the monitoring (internal information table in figures 19 and 18, col. 10, lines 39-49);

communicating the message externally of the image forming device at a predetermined moment in time (col. 10, lines 50-52: the contents of the internal information table is transmitted to the local unit 11 in accordance with inquiry commands by the local unit 11 in fig. 5 at a predetermined moment in time "col. 6, lines 7-12).

As to claim 24, Kobayashi discloses every feature discussed in claim 17, and further teaches of generating the message comprising a composite message including a plurality of statuses corresponding to at least one imaging consumable (the table 81 in fig. 19 indicates two statuses of the toner).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kobayashi et al. (US Patent No. 6,735,641 B1) and Molbak (US Patent No. 6,758,316 B2).

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As to claim 1, Kobayashi teaches an image forming device (71 in fig. 18 or 3-1 in fig. 5) comprising:

an interface (i.e., network communication control unit in fig. 18) adapted to communicate with a communication medium external of the image forming device (2 in fig. 5);

imaging circuitry (i.e., printer mechanism engine unit 74 in fig. 18) configured to use an imaging consumable to form hard images (col. 10, lines 19-21);

a sensor (78 in fig. 18) configured to monitor a status of the imaging consumable (col. 10, lines 23-25 and fig. 19 indicates sheets, toner... would be a imaging consumable); and

processing circuitry (i.e., 75 and 73 in fig. 18) coupled with the sensor and configured to generate a message indicating the status of the imaging consumable (internal information table in figures 19 and 18, col. 10, lines 39-49) and to synchronize with another image forming device ( a plurality of printers 3-1 to 3-n in fig. 5 are in the synchronization).

However, Kobayashi does not teach processing circuitry to control a timing of a communication of the message externally of the image forming device.

Molbak teaches processing circuitry to control a timing of a communication of the message externally of the image forming device (col. 23, lines 40-41 indicates the printer has a function for periodic maintenance reports; it is noted that the printer from Molbak inherently comprises a component corresponding to the processing circuitry for controlling a timing of a communication of the message externally of the image forming device).



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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the processing circuitry of Kobayashi for controlling a timing of a communication of the message externally of the image forming device as taught by Molbak. The suggestion for modifying the processing circuitry of Kobayashi can be reasoned by one of ordinary skill in the art as set forth above by Molbak because the modified printing systems would increase the functionalities of the processing circuitry for automatically reporting the statuses and consumable of the printer to the output device. Such a modification would avoid the requesting report by the output device so that the burden of the traffic on the network is eliminated.

As to claim 2, Kobayashi and Molbak disclose every feature discussed in claim 1, and Kobayashi teaches a plurality of printers is synchronized and report to the output device (11 in fig. 5, col. 6, lines 7-11) and Molbak teaches a printer to control a timing of a communication of the message externally of the image forming device (col. 23, lines 40-41). Thus, the combination of Kobayashi and Molbak teaches the processing circuitry is configured to detect a predetermined moment in time to synchronize with another image forming device.

As to claim 3, Kobayashi and Molbak disclose every feature discussed in claim 1, and Kobayashi further teaches the image circuitry is configured to print hard images upon media (i.e., toner or sheets in fig. 19).

As to claim 5, Kobayashi and Molbak disclose every feature discussed in claim 1, and Kobayashi further teaches the processing circuitry is configured to generate the message comprising a status including one status (the table 81 in fig. 19 indicates at least one status).

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As to claim 6, Kobayashi and Molbak discloses every feature discussed in claim 1, and Kobayashi further teaches the processing circuitry is configured to generate the message comprising a composite message including a plurality of statuses corresponding to at least one imaging consumable (the table 81 in fig. 19 indicates two statuses of the toner).

5. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. as applied to claim 11, and in combination with Molbak (US Patent No. 6,758,316 B2).

As to claim 12, Kobayashi discloses every feature discussed in claim 11, and further teaches processing circuitry is configured to generate a message indicating the status of the imaging consumable (internal information table in figures 19 and 18, col. 10, lines 39-49) and to synchronize with another image forming device (a plurality of printers 3-1 to 3-n in fig. 5; col. 6, lines 7-11);

However, Kobayashi does not teach processing circuitry to control a timing of a communication of the message externally of the image-forming device.

Molbak teaches processing circuitry to control a timing of a communication of the message externally of the image forming device (col. 23, lines 40-41 indicates the printer has a function for periodic maintenance reports; it is noted that the printer from Molbak inherently comprises a component corresponding to the processing circuitry for controlling a timing of a communication of the message externally of the image forming device). Thus, the combination of Kobayashi and Molbak teaches the processing circuitry

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is configured to synchronize with another image forming device to control the timing of the communication of the composite message.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the processing circuitry of Kobayashi for controlling a timing of a communication of the message externally of the image forming device as taught by Molbak. The suggestion for modifying the processing circuitry of Kobayashi can be reasoned by one of ordinary skill in the art as set forth above by Molbak because the modified printing systems would increase the functionalities of the processing circuitry for automatically reporting the statuses and consumable of the printer to the output device. Such a modification would avoid the requesting report by the output device so that the burden of the traffic on the network is eliminated.

As to claim 13, Kobayashi and Molbak disclose every feature discussed in claim 12, and Kobayashi further teaches the processing circuitry is configured to send the composite message at a predetermined moment in time to synchronize with the another image forming device (col. 10, lines 50-52 and col. 6, lines 7-12).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kobayashi and Molbak as applied to claim 1, and in view of Chapman et al. (US Patent No. 6,522,421 B2).

As to claim 4, Kobayashi and Molbak disclose every feature discussed in claim 1, and Kobayashi further teaches the interface is adapted to communicate with the communication medium comprising a packet switched network (2 in fig. 5), and the

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processing circuitry (i.e., 75 and 73 in fig. 18) is configured to formulate the message (internal information table in figures 19 and 18, col. 10, lines 39-49).

However, neither Kobayashi nor Molbak teach the message comprising an email message.

Chapman teaches the message for reporting from the printer comprising an email message (49 in fig. 2) to the output device via the network (col. 3, lines 47-54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the processing circuitry of Kobayashi and Molbak for reporting comprising the email message as taught by Chapman. The suggestion for modifying the processing circuitry of Kobayashi and Molbak can be reasoned by one of ordinary skill in the art as set forth above by Chapman because the modified systems would increase the functionality of the printers for communicating with output device by sending an email message. Such a modification would allow the printing systems to be flexible for communicating with other apparatuses by the email communication.

7. Claims 9, 15, 20, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi as applied to claims 7, 11, 17, 22, and in combination with Chapman et al. (US Patent No. 6,522,421 B2).

As to claim 9, Kobayashi discloses every feature discussed in claim 7, and further teaches the interface is adapted to communicate with the communication medium comprising a packet switched network (2 in fig. 5) and the processing circuitry (i.e., 75 and 73 in fig. 18) is configured to formulate the message (internal information table in figures 19 and 18, col. 10, lines 39-49).

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However, Kobayashi does not teach the message comprising an email message.

Chapman teaches the message for reporting from the printer comprising an email message (49 in fig. 2) to the output device via the network (col. 3, lines 47-54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the processing circuitry of Kobayashi for reporting comprising the email message as taught by Chapman. The suggestion for modifying the processing circuitry of Kobayashi can be reasoned by one of ordinary skill in the art as set forth above by Chapman because the modified systems would increase the functionality of the printer for communicating with output device by sending an email message. Such a modification would allow the printing system to be flexible for communicating with other apparatuses by the email communication.

As to claim 15, Kobayashi discloses every feature discussed in claim 11, and further teaches the interface is adapted to communicate with the communication medium comprising a packet switched network (2 in fig. 5) and the processing circuitry (i.e., 75 and 73 in fig. 18) is configured to formulate the message (internal information table in figures 19 and 18, col. 10, lines 39-49).

However, Kobayashi does not teach the message comprising an email message.

Chapman teaches the message for reporting from the printer comprising an email message (49 in fig. 2) to the output device via the network (col. 3, lines 47-54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the processing circuitry of Kobayashi for reporting comprising the email message as taught by Chapman. The suggestion for modifying the processing circuitry of Kobayashi can be reasoned by one of ordinary skill in the art as

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set forth above by Chapman because the modified systems would increase the functionality of the printer for communicating with output device by sending an email message. Such a modification would allow the printing system to be flexible for communicating with other apparatuses by the email communication.

As to claim 20, Kobayashi discloses every feature discussed in claim 17.

However, Kobayashi does not teach the communicating comprises communicating the message comprising an email message.

Chapman teaches the communicating comprises communicating the message comprising an email message (49 in fig. 2) to the output device via the network (col. 3, lines 47-54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the processing circuitry of Kobayashi for reporting comprising the email message as taught by Chapman. The suggestion for modifying the processing circuitry of Kobayashi can be reasoned by one of ordinary skill in the art as set forth above by Chapman because the modified systems would increase the functionality of the printer for communicating with output device by sending an email message. Such a modification would allow the printing system to be flexible for communicating with other apparatuses by the email communication.

As to claim 23, Kobayashi discloses every feature discussed in claim 22.

However, Kobayashi does not teach the communicating comprises communicating the message comprising an email message.

Chapman teaches the communicating comprises communicating the message comprising an email message (49 in fig. 2).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the processing circuitry of Kobayashi for reporting comprising the email message as taught by Chapman. The suggestion for modifying the processing circuitry of Kobayashi can be reasoned by one of ordinary skill in the art as set forth above by Chapman because the modified systems would increase the functionality of the printer for communicating with output device by sending an email message. Such a modification would allow the printing system to be flexible for communicating with other apparatuses by the email communication.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran  
July 28, 2004

